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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,924	05/30/2001	Blake J. Roessler	UM-06191	7554
7590 07/15/2004				
MEDLEN & CARROLL, LLP		EXAMINER		
Suite 2200		FUBARA, BLESSING M		
220 Montgomery Street		ART UNIT		
San Francisco, CA 94104		PAPER NUMBER		
		1615		

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/867,924

Applicant(s)

ROESSLER ET AL.

Examiner

Blessing M. Fubara

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 06/03/02
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Examiner acknowledges receipt of IDS filed 06/03/02, change of power of attorney filed 09/17/02, letter of status inquiry filed 12/02/02, and letter requesting to know status of application filed 06/16/04.

Priority

1. Applicants' claim for domestic priority under 35 U.S.C. 119(e), for provisional application number 60/208,728 is acknowledged.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-15, 25-29, 32-45 and 60-64 are rejected under 35 U.S.C. 102(a) as being anticipated by Bielinska et al. ("Applications of membrane-based dendrimer/DNA complexes for solid phase transfection in vitro and in vivo," *Biomaterials*, 21 (2000) 877-887, published May 2000 and cited by applicants on Form PTO-1449).

Bielinska discloses membrane based dendrimer/DNA complexes for solid phase transfection in vitro and in vivo (Title and abstract). PLGA polymer membrane, phosphatidylglycerol (PG)-collagen/fibronectin membranes are utilized for topical delivery of the DNA/dendrimer complexes into skin cells and cultured cells were successfully transfected with the DNA/collagen complex (877-885). Bielinska meets the limitations of the claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16-24, 30, 31 and 46-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bielinska et al. ("Applications of membrane-based dendrimer/DNA complexes for solid phase transfection in vitro and in vivo," *Biomaterials*, 21 (2000) 877-887, published May 2000 and cited by applicants on Form PTO-1449) and Shea et al. (WO 99/58656).

Bielinska discloses DNA/dendrimer system that is topically used to deliver nucleic acid. Bielinska does not disclose applying the complex to a target site to treat wound.

Shea discloses a composition comprising nucleic acid segment that is associated with a structural matrix (claim 1). The structural matrix is biodegradable and biocompatible matrix comprised of lactic acid/glycolic acid copolymer (claims 6-12) or polysaccharide (claims 13-150) and the nucleic acid is DNA (claim 17). The DNA or nucleic acid segment encodes growth factors, hormones proteins (page 15, lines 28-31 and page 16, lines 14-17); and the composition is used to promote wound healing (page 19, lines 14-18) by placing the composition, which is the matrix-gene composition, in contact with the target site or tissue (page 55, line 6 and claims 19-25). Since Shea applies a DNA/porous matrix of PLGA to a wound site to promote wound healing and since Bielinska topically applies DNA/dendrimer complex of PLGA for delivery of DNA/gene to a target site, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the DNA/dendrimer of Bielinska to a wound site. One

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having ordinary skill in the art would have been motivated to apply the DNA/dendrimer of Bielinska at a target site as disclosed by Shea with the expectation that the DNA/dendrimer complex will promote wound healing.


5. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is (571) 272-0594. The examiner can normally be reached on 7 a.m. to 3:30 p.m. (Monday to Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 Blessing Fubara
Patent Examiner
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THURMAN K. PAGE
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